

USAWC STRATEGY RESEARCH PROJECT

**BOEING'S INTEGRATED DEFENSE SYSTEMS  
RESTRUCTURING: SIGNIFICANT AND PREVENTABLE  
COST IMPACTS TO ARMY AVIATION PROGRAMS**

by

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## ABSTRACT

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The Boeing Company's 2002 corporate restructuring, creating today's Integrated Defense Systems (IDS), added tens of millions of dollars to current Army aviation program costs. The new IDS accounting structure enabled the company to shift expenses from inefficient to efficient programs. At the Boeing Philadelphia and Boeing Mesa facilities, where the Army's CH-47F/G (Chinook) and AH-64A/D (Apache Longbow) are built and remanufactured, the additional costs will possibly exceed \$68M and \$71M, respectively, over a six year period (CYs '03-'08). Within an environment where defense contractors wield increasing power, it is imperative that the Army/DoD exercise due diligence and leverage when required, to ensure the cost protection of Service programs. There are tools available to assist the Services in this undertaking, one such formidable alternative being the proactive application and enforcement of cost accounting standards. Applied appropriately, these flexible standards enable contractor agility while protecting Government interests.



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## **BOEING'S INTEGRATED DEFENSE SYSTEMS RESTRUCTURING: SIGNIFICANT AND PREVENTABLE COST IMPACTS TO ARMY AVIATION PROGRAMS**

The continued erosion of the United States' defense industrial base portends significant detrimental effects for many Department of Defense (DoD) weapon system programs. Since the heady days of the Cold War, defense industrial capability and capacity have been sharply declining while DoD's weapon system procurement costs have been steadily rising. This especially holds true when considering the contributions of private industry. However, the Government's "organic" depot capabilities (i.e. for weapon system maintenance, repair and rebuild) have also significantly atrophied during this same time-frame. The causes for this decline are many and multi-faceted.

There now remain only a handful of companies significantly engaged in the defense aerospace marketplace. However, within this diminishing environment, defense contractors continue to gain in both prestige and power. With defense work comprising an ever-smaller portion of the business base, Government leverage with these materiel providers is increasingly reduced. Recent experience has witnessed defense contractors executing "efficiency-seeking" operational decisions with significant detrimental effects for Army programs. While many of these decisions remain beyond the Government's span of control, a sub-set is well within the purview of U.S. defense officials and policy-makers to directly affect. Since a robust defense industrial foundation, favorable to domestic defense interests, is essential for the current and future security of our nation, it falls to defense leaders at all levels to employ effective measures to address this situation when and where possible. In some instances we are falling well short of this goal.

Within this paper, I will explore the reasons for this phenomenon, scope the depth/breadth of the issue and use as a case study the CH-47F/G (Chinook) and the AH-64A/D (Apache) helicopter programs; weapon systems designed, developed, fielded, and supported by The Boeing Company (Boeing), a key contractor within the U.S. Army's rotary-wing aviation industrial base. Within this context, I will explore Boeing's 2002 Integrated Defense Systems restructuring, demonstrate the negative cost impacts to the Army's Chinook and Apache programs and finally present alternatives for how these types of cost impacts might be avoided in the future.

### **BACKGROUND**

It is doubtful that the euphoria associated with the end of the Cold War was universally shared in the corporate boardrooms of America. War is usually good for business and this

particular war was certainly no exception. For an uninterrupted period of 45 years, America's most prominent weapon system builders had operated in an environment without precedent. In 1989, all of this came to an abrupt end. As the Berlin Wall was knocked from its foundation and smashed into shards suitable for sale to tourists, it is not hard to imagine what may have been occurring at many defense-related manufacturing concerns. Board meetings would be called and a pointed question posed to all present; simply... "What now?" The answer would be determined to be elusive, quite complex, and arguably, is still being worked through some 15 years later.

For most weapon system purveyors, the slow-down in the level of effort was near immediate. Many, if not most, weapon system design, development, and manufacturing efforts were at that time pursued via one-year cost or fixed-price type contracts. Within the context of declining requirements, this feature allowed unilateral Government re-structuring of the work without the significant cost and delays associated with "work terminations" for the convenience of the Government.

Early in the Clinton Administration, Secretary of Defense Les Aspin and Deputy Secretary of Defense William Perry hosted a meeting with the leaders of America's most prominent defense contractors. During what was to become known as "The Last Supper," Aspin and Perry depicted what they saw as the future defense environment.<sup>1</sup> They bluntly informed the group that DoD would no longer procure the number of weapon systems that had enabled them to prosper during the Cold War and especially during the latter years of the Reagan build-up. They predicted that within five years, 50% of the companies represented at the meeting would no longer be in business. While they did not explicitly lay out strategy, Aspin and Perry did encourage mergers and acquisitions where appropriate and indicated overall DoD acceptance and support for this approach.<sup>2</sup>

As recent history has shown, this candid meeting between Government and industry power-brokers was a seminal event. In its aftermath, a series of corporate mergers and acquisitions transformed the defense industry landscape, as companies moved to capture work, consolidate advantage, and acquire desired capability. In a few short years, the field of major defense contractors had been significantly reduced. Within the defense aerospace industry, some 40 companies, in whole or in part, were reduced to just three; Boeing, Lockheed, and Raytheon.<sup>3</sup>

Within the sub-set of defense's industry's rotary-wing sector, the story was much the same. In 1997, Raytheon merged with the defense business unit of Texas Instruments and acquired Hughes Aircraft (i.e. the original designer/builder of the AH-64A Apache helicopter).

In that same year, Boeing wholly acquired McDonnell Douglas Aircraft Company (MDAC), retaining, among other things, the (now) MDAC AH-64A/D Apache helicopter line, while divesting the MD Helicopter Inc.'s 500 series light helicopter line.<sup>4</sup>

As the remaining defense industry players maneuvered to divide the much-reduced workload, a less overt and more far-reaching force was beginning to encroach upon the defense business environment. The unfettered opening of the market place, somewhat stymied by the bi-polar world of the previous four (+) decades, and now greatly facilitated by increasingly sophisticated information technologies, was fully unleashed. The impacts of the globalization of the marketplace upon the U.S. defense industry in general were not immediately recognized. Their long-term ramifications are still not fully appreciated and/or understood. It is certain that within this new high-stakes environment, some companies saw the level of competition rise to yet new heights, as foreign companies, governments, and even multi-national conglomerates aligned against them. One such embattled entity was Boeing.

The Boeing Company, a \$44.05B<sup>5</sup> behemoth, at the time sectorized into Aviation and Missile, Space and Communications, and Commercial Aviation business units, was simultaneously assailed on two fronts. As the U.S. military and Foreign Military Sales (FMS) workload continued to decline, the much larger commercial side of the business faced direct challenge as well. Boeing's emerging European peer competitor, Airbus, the European Union's multi-national aerospace conglomerate, took aim squarely at Boeing's commercial aviation business base. Needless to say, Boeing had significant difficulty competing with the very capable, efficient, and highly subsidized Airbus. Finally, in 2003, Boeing was overtaken by Airbus as the world's leading producer of mid to large sized commercial jets.

Within this environment, Boeing leadership busied itself with the consideration of a myriad of business alternatives oriented upon improving the company's near to mid-term prospects. Much effort focused upon improving efficiencies while reducing controllable variable costs. This unprecedented period of innovation and thrift witnessed the incorporation of such favorable practices as "lean manufacturing." Oriented upon the reduction of inefficiencies in material resources and labor processes within (primarily) manufacturing settings, the value of this applied concept cannot be overstated. However, other Boeing initiatives, similarly focused upon cost reduction, operational streamlining, and efficiency gains were not so favorably evident in concept or practice.

Within Boeing's DoD-related business units (i.e. Aviation and Missile, Space and Communications), and specifically within the company's Rotorcraft division, this truth was borne out in actions taken within two distinct areas; 1) outsourcing of work (i.e. make or buy) and, 2)

organizational re-structuring. While the former had the effect of eliminating domestic capability to manufacture significant sub-assemblies and spare parts for the AH-64A/D (Apache) helicopter, the latter, and the focus of this paper, resulted in significant cost increases for all Boeing-produced Army helicopter programs, including the CH-47F/G Chinook and AH-64A/D Apache.

### **BOEING'S INTEGRATED DEFENSE SYSTEMS RESTRUCTURING**

Boeing formed Integrated Defense Systems (IDS) in July 2002 under the leadership of the company president/CEO, Mr. Jim Albaugh. The intent of the restructuring was simple enough in concept and seemingly benign to all parties. With the consolidation of the company's Aircraft and Missile Systems and Space and Communications business units, Boeing hoped to realize immediate business streamlining and customer support enhancements. The new entity, which encompassed Boeing's Space and Defense business base, was re-organized into ten customer-defined business units under the IDS umbrella.<sup>6</sup>

Formerly, programs from all customers (regardless of Service and/or agency affiliation), had been aggregated under the Aviation and Missile (A&M) and Space and Communications (S&C) organizations. Former A&M programs included the Air Force's 767 Tanker/Transport, the Army's AH-64A/D Apache attack helicopter, the Marines AV-8B Harrier Plus Fighter/Bomber, the Navy's F/A-18 E/F Super Hornet, and multi-service unmanned combat aerial vehicles and munitions programs, to name just a few. All told, some 16 major programs resided within the A&M organization. S&C was little different, with 14 major programs comprising the business unit's base. These programs were particularly divergent, ranging from the Airborne Laser system for the Air Force, the Army's Future Combat System, multi-agency satellite programs, to the Space Shuttle system for NASA.<sup>7</sup>

The former A&M and S&C business units were each quite unique and this was considered by Boeing leadership as awkward. With work spread to some 28 separate sites across the U.S., there were marked differences in site-specific cultures, operational philosophies, even accounting structures and procedures. This last resulted in markedly different handling/treatment of program costs at the various sites. For Boeing, essentially an amalgamation of a myriad of former competitor workforces, business systems, and facilities, this was not a surprising phenomenon, though it certainly was a recognized liability from an efficiency standpoint.

Under the IDS reorganization, major programs were gathered under the following business units: Air Force Systems, Army Systems, Naval Systems, Homeland Security and

Services, IDeAS (Future Concepts), Missile Defense Systems, Launch and Satellite Systems, NASA Systems, Space and Intelligence Systems, and Aerospace Support.<sup>8</sup> Though the geographic separation of specific business unit work remained, Boeing anticipated many benefits from this restructuring. Within the IDS markets, Boeing associated the following advantages to the company's restructuring: Inter-service program interoperability, architecture commonality, rapid recognition/integration of operational best-practices, infrastructure investment leveraging, horizontal integration, and significantly reduced recurring costs.<sup>9</sup> Direct customer benefits included enhanced needs anticipation, communication, and company adaptability. At the macro level, the reorganization promised to modify Boeing's approach from platform-centric, to one oriented upon systems-level solutions.<sup>10</sup> According to Boeing briefings presented to Army program management and on-site representatives, the IDS restructuring was all upside for the DoD.

#### INHERENT COST STRUCTURE MODIFICATIONS

The IDS organizational re-alignment came with attendant cost structure modifications. According to Boeing cost-management representatives, these cost re-structuring and/or re-allocations would have little or no impact upon program costs at the IDS and/or DoD level. This position was conveyed in numerous forums beginning in December 2002.<sup>11</sup> Within initial contractor-Government communications on the IDS restructuring initiative in late 2002, Boeing identified three top-level cost restructuring issues to the Army. These included the creation of a single General and Administrative (G&A) cost pool for all of IDS, the combination of former A&M and S&C Independent Research and Development (IRAD) bid and proposal costs, and the creation of a uniform Business Development Support cost allocation.<sup>12</sup> While the former two modifications were oriented upon a logical aggregation and subsequent re-allocation of associated overhead costs, implementation of the latter was deemed necessary from the standpoint of consistency across the new IDS organization. Former A&M sites had, in the past, received no Business Development cost allocation, whereas S&C sites had. With the implementation of IDS, a stated goal was consistent accounting treatment of costs across the organization, if at all feasible.

As forwarded by the company, these cost structure changes were consistent with the intent and scope of the IDS restructure and, at least at the macro level, represented no significant cost increases to any particular Service and/or program. Company officials continued to stress the macro-level benefits associated with the IDS decision, downplayed the associated Service-level cost shifts, and focused upon insignificant potential cost impacts at the

departmental level. In communications with Army leadership (at all levels), Boeing held steadfastly to the position that IDS-related cost impacts to its programs would be negligible.

#### ARMY PROGRAM COST IMPACTS

Early in 2003, upon the Army's request, Boeing provided additional IDS-related cost information for Government review. The on-site Defense Contract Management Agency (DCMA) at Boeing Mesa, in conjunction with its sister organization resident at the Boeing Philadelphia site, conducted a joint DCMA/Defense Contract Audit Agency (DCAA) audit of the IDS-related cost information. The results of this audit were at once surprising and disheartening. Contrary to what had been presented earlier by the company, the review concluded that the cost impacts associated with the IDS restructure would be quite significant at the Army program level, and not at all insignificant at the DoD level.

Immediate concerns were each of the three top-level IDS-related cost allocation changes proposed by the company; 1) creation of a single G&A cost pool for all of IDS; 2) the combination of former A&M and S&C Independent Research and Development (IRAD) bid and proposal costs; 3) and the creation of a uniform Business Development Support cost allocation across the IDS organization. While consistent with the intent and spirit of IDS, the potential inequities of this overt cost shift policy were readily apparent to Government reviewers.

The primary issue with the above modifications resided within the causal-beneficial relationship between a site's overhead costs, the costs' aggregation and their subsequent allocation to programs. Under the previous A&M and S&C construct, site overhead costs were collected and subsequently allocated directly to the programs with which they were associated. For example, those overhead costs generated at Boeing Mesa where the AH-64A/D Apache work was conducted were allocated primarily to the Apache program. The general idea being that the program(s) responsible for the generation of the costs (i.e. those that received the benefit), should be the same program(s) which subsequently pay the bill (i.e. are allocated the costs). Under the IDS construct of over-arching co-mingling, aggregation, and subsequent re-allocation of multiple-site overhead costs, this would no longer be the process. Under the IDS G&A cost pooling construct, overhead costs generated by the 28 disparate sites would be aggregated (i.e. pooled) and subsequently re-allocated across the IDS organization. Considering the differing levels of site-specific contributions to these cost pools and the subsequent "peanut butter spread" apportionment of these costs across the organization, the inequities associated with this cost treatment approach were immediately apparent. Most troublesome was that the highly efficient sites associated with Army work (i.e. Philadelphia and

Mesa) would thus be “taxed” for the inefficiencies of other sites. Several of the former S&C sites associated with USAF programs in California were particularly noteworthy for their inefficiencies and high site-specific G&A expense levels.

In a perfect world where all sites experienced the (exact) same level of associated overhead costs, this would not have been problematic. Reality is that overhead costs vary remarkably from place to place (i.e. program to program) and a “leveling” or “peanut butter spread” of cost allocations (with no detrimental effects to all programs) is simply not possible. As Boeing applied the cost structure changes associated with IDS, the program impacts at the Army level were instantly evident and quite significant.

Within the G&A data provided by Boeing for the Government review, it was immediately apparent that the former A&M sites were getting the short end of the IDS stick. Within the G&A sub-categories of Bid and Proposal costs, the former A&M sites, including Philadelphia and Mesa, accounted for only 38% of the costs, yet post-IDS would be allocated a full 50%. Within the Business Development sub-category of G&A costs, former A&M sites would similarly receive a 50% cost allocation, yet they were responsible for only 47% of the actual costs. All told, the G&A expense of the former A&M sites would rise from 12.9% to 14% (a 1.1% increase), while former S&C sites would realize net decreases of approximately 1%.<sup>13</sup> Even at first glance, the IDS restructure created clear “winners” and “losers” at the Service/program level. Whereas Army programs at Mesa (i.e. Apache) and Philadelphia (i.e. Chinook and at that time Comanche) would absorb expense and realize programmatic cost increases, other Service/agency programs (e.g. launch and satellite, missile defense systems) would directly benefit and realize net cost decreases.<sup>14</sup>

Unfortunately, the G&A recompilation was just one area of the IDS restructuring that was unfavorable to Army programs. Under IDS, the treatment and handling of Boeing World Headquarters (BWHQ) costs, common or shared systems costs, Shared Services Group costs, fringe benefit costs (including pensions and medical retirement expense), and program support costs would be greatly altered. To a large degree, most of these costs were “new” costs to former A&M sites; and directly associated with IDS-driven changes in the accounting, aggregation, and finally, allocation of these expenses.<sup>15</sup>

One such example is the addition of the Shared Services Group (SSG) expense to the Mesa and Philadelphia accounting ledgers. Under the IDS construct, the SSG provided (for a fee of course), a centralized, off-site administrative services capability (e.g. printing, copying, facility maintenance, etc.) Prior to, and even after the implementation of IDS, the Mesa and Philadelphia site managers chose to maintain their own, very low cost organic capability to

handle such service requirements. Apparently, on-site responsiveness was determined to merit the small additional expense, and so, where there was once efficiency, there was now redundancy and additional cost.

For the years 2003-2005, IDS-related cost increase estimates approached \$62M for Philadelphia, \$50M for Mesa. For the former, \$36.7M of those increases were attributed to Army programs (CH-47 and at the time, Comanche), for the latter, \$32M.<sup>16</sup> Of the \$32M for the Mesa programs, Apache and Apache Spares, \$23M of the IDS-related cost increase was associated w/the Apache aircraft program, the remainder (approx. \$9M) attributable to the Apache Spares program.<sup>17</sup> The Philadelphia/Mesa breakout of IDS-related cost increase projections for the years '03 – '05 is as depicted in table 1.<sup>18</sup>

IDS Cost Increases	CY '03	CY'04	CY'05	Total
Philadelphia	\$2.9M	\$8.9M	\$24.9M	\$36.7M
Mesa	\$3.3M	\$9.6M	\$19M	\$32M

TABLE 1. IDS-RELATED COST INCREASE PROJECTIONS (CYS '03-'05)

For the three year CY '03-'05 timeframe depicted in Table 1., the \$32M IDS-related impacts to the Apache program were attributable to the following sub-categories of cost increases.<sup>19</sup>

- Home Office Allocations: \$5.4M
- Common/Shared Systems: \$6.1M
- Fringe Benefits: \$9.9M
- Business/Program Support: \$4.5M
- IDS G&A Increase: \$6.1M

Follow-up analysis covering the years 2006-2008, was equally unfavorable for both Philadelphia and Mesa. By employing a reasonable set of operational assumptions, estimating inflationary trends and extrapolating from '03-'05 cost increase projections, DCMA/DCAA auditors arrived at the following cost increase projections for calendar years '06 – '08:<sup>20</sup>

IDS Cost Increases	CY '06	CY'07	CY'08	Total
Philadelphia	\$13.7M	\$10M	\$7.3M	\$31M
Mesa	\$5.8M	\$13.1M	\$20M	\$38.9M

TABLE 2. IDS-RELATED COST INCREASE PROJECTIONS (CYS '06-'08)

The further breakdown of cost projections for these subsequent years is remarkably similar (in percentages) to the CY '03 – '05 timeframe and thus further depiction is unnecessary. Suffice it to say that the premise of negligible programmatic cost impact associated with the IDS

restructuring simply did not hold up under closer scrutiny. Army programs at Philadelphia and Mesa would certainly feel the pain of the IDS restructure and the impacts would be in the tens of millions of dollars.

#### INFORMING THE CUSTOMER OF PENDING COST IMPACTS

Resident DCMA commanders at Philadelphia and Mesa ensured that the affected customers were immediately notified of the projected IDS-driven cost impacts to their programs. Detailed cost increase information was provided in briefings and telephonic conferences with program management office (PMO) business division chief personnel. Program managers were made aware of the immediate impacts to current year budget baselines, and later, of the projections for future year outlay impacts.

Over the summer of 2003, several DCMA/DCAA, PMO, Boeing meetings were held in Huntsville, AL (i.e. the home of the Program Executive Office for Army Aviation systems) to discuss the ramifications to current program baselines and the subsequent impacts to the FY '06-'11 Army Aviation program objective memorandum (POM). During these discussions, Boeing's position began to evolve, the company now postulating that though Service-level programmatic cost increases would be realized, at the departmental level, IDS cost impacts were essentially "a wash."<sup>21</sup> Later Army review proved this premise as inaccurate as the first, the IDS restructure costing the DoD some \$40M in 2003 alone.<sup>22</sup>

In June 2003, the Assistant Secretary of the Army (Acquisition Logistics and Technology), (ASA(ALT)), Mr. Claude Bolton, and staff were briefed by the DCMA Defense Corporate Executive (DCE), Mr. Michael Merritt, and Philadelphia and Mesa commanders, LTCs Kirk Vollmecke and Keith Edwards, respectively, on the IDS-related cost impacts to Army programs for the years CY '03 – '05. Five months later, in November 2003, this same DCMA group briefed the ASA (ALT) and staff on projected programmatic cost impacts for the years CY'06 – '08. In a subsequent, separate, Boeing-sponsored briefing to the ASA (ALT)/staff that same afternoon, a senior company representative briefed that the IDS-related cost impacts at the Army (program) level were negligible and that these same "impacts" were simply non-existent from a departmental perspective.<sup>23</sup>

The meeting concluded with the ASA (ALT) conveying his overt displeasure with the current situation and a clear indication to Boeing representatives that the final word had not yet been spoken on the volatile subject of the IDS restructure. To continue the discussions, a further, private side-bar meeting was immediately convened between the ASA (ALT) and the (then) Boeing Chief Financial Officer (CFO), Mr. Michael Sears. The DCMA and Boeing

representatives came away from the discussions with several taskers. These actions consisted primarily of building improved Government-contractor mechanisms to monitor and control local indirect costs, structuring processes to enable more timely communication of pending cost impacts, and the exploration of agreed-to cost increase thresholds, enforceable through contractual mechanisms.<sup>24</sup>

However, beyond these initiatives, no further action was taken by the Government. In the final analysis, Boeing's IDS restructuring was considered to be a reasonable action undertaken by a rational, profit-seeking business entity. The thought was that as long as the IDS-related accounting changes were in accordance with generally accepted accounting principles (GAAP), there was little the Government could do.

In reality however, there were options available to the Government in this instance. One such alternative, discussed very early in the process but set aside, was the application of the cost accounting standards associated with the efforts in Philadelphia and Mesa. Enforcement of these standards could have proven an effective means of exercising leverage over the uncooperative contractor; a contractor intent on making accounting changes, favorable to the company bottom line but clearly detrimental to Government interests.

#### **COST ACCOUNTING STANDARDS HAVE RELEVANCE AND VALUE**

Cost accounting standards (CAS) are an outgrowth of Government concern over the pricing and accounting practices employed by defense contractors.<sup>25</sup> Citing a lack of consistency in defense contractors' cost accounting practices, in 1968 Congress asked the (then) General Accounting Office (GAO), since renamed General Accountability Office, to determine the feasibility of establishing and applying CAS to drive cost accounting consistency as a basis for the negotiation and administration of federal procurement contracts.<sup>26</sup> Upon favorable review, Congress established the Cost Accounting Standards Board (CASB), which developed and promulgated the CAS. The standards, derived from industry best-practice, and advice/comment from Government agencies, industry and professional accounting associations, were implemented in 1980.<sup>27</sup>

Contrary to popular belief, CAS are not an onerous, inflexible set of rules, regulations, and procedures designed to drive complete uniformity in cost accounting practices. Rather, they are a set of standards, applied to all types of Government contracts, designed to enable informed accounting/costing review by federal auditors. They do provide limits and constraints on what practices are considered appropriate under certain circumstances and in this way encourage uniformity and consistency in the treatment of costs.<sup>28</sup>

The twenty cost accounting standards (i.e. CAS 401 - 420) address three primary areas of concern: 1) Measurement of cost, 2) Assignment of cost to a cost accounting period, and 3) Allocation of cost to cost objectives.<sup>29</sup> The CAS most applicable to the Boeing IDS decision directly relate to the third area of concern, the allocation of cost to cost objectives. Specifically, CAS 403 concerns the allocation of home office expenses to business segments, CAS 418 addresses the allocation of direct and indirect costs in general, and CAS 420 focuses upon accounting treatment for Independent Research and Development (IRAD) bid and proposal costs.<sup>30</sup>

Compliance with CAS (in total) is mandatory for contractual efforts requiring “disclosure and consistency in accounting practices.”<sup>31</sup> The Army programs at Philadelphia and Mesa are subject to “full disclosure” and therefore must adhere to full compliance with all CAS. Remedies for non-compliance are usually exercised by the Administrative Contracting Officer (ACO) through the required submission, review and approval of the contractor Disclosure Statement. This document is a complete description of the company’s cost accounting practices and procedures. The Disclosure Statement is used by DCAA as a measure of the contractor’s consistency and compliance in routine application of accounting practices with regard to applicable CAS.<sup>32</sup>

Disclosure Statements must pass two litmus tests, one for adequacy (i.e. the statement adequately describes the company’s accounting practices), the other for compliance (i.e. the accounting practices as described are fully compliant with applicable CAS). Failure within either area is typically discovered and reported by DCAA during routine audit. The auditor is responsible to report either the inadequacy and/or non-compliance to the DCMA ACO, who makes the final determination. Disclosure Statement inadequacies are usually addressed by requiring the contractor to submit a revised statement. Upon determination that the statement is current, accurate, and complete, it is accepted upon the basis of adequacy. A finding of non-compliance is typically more involved (and emotional) for all parties. Non-compliance connotes either non-compliance with a specific standard or that the contractor is not consistently following its own disclosed practices.<sup>33</sup>

After the initial issuance of a finding on non-compliance (i.e. by the ACO), the contractor has 60 days to submit a description of the accounting changes required for compliance, a description of the potential impacts of the changes, and an estimate of the cost of the change(s).<sup>34</sup> If the contractor disagrees with the ACO’s finding, it has 60 days to present a rebuttal argument and supporting evidence. After a review of all information, the ACO issues a final determination of compliance or non-compliance; in the event of non-compliance, the

contractor then has 60 days to submit a cost impact for each CAS-covered contract, from the date of failure to comply. If the ACO determines the cost impact to be material, he remedies the infraction by effecting a price adjustment to the effort via a contract modification.<sup>35</sup>

Arguably, this is the process that the Government could have followed when Boeing initially proposed the accounting changes associated with the IDS restructure. The reason why this line of pursuit was discarded early in the process is not apparent. At the Philadelphia and Mesa facilities, a solid basis for non-compliance was evident. The information provided in Table 3, clearly and overwhelmingly supports this premise.

Table 3, entitled “IDS Non-Compliance with CAS 403, 418, 420,” depicts the three accounting standards of interest in the Boeing IDS restructure scenario. In the first column, the accounting standard is identified. In the second column, the standard’s key requirements are presented. In the third column, the change(s) driven by the IDS restructure are depicted. In the fourth column, the reasons for CAS non-compliance are shown.

Applicable Standard	Key Requirements	IDS-Driven Change(s)	Non-Compliance
<u>CAS 403</u> - Allocation of Home Office Expenses to segments	- Expenses allocated on the basis of a causal – beneficial relationship (supporting and supported activities). <sup>36</sup>	- Sites receive cost allocations for expenses that are not site-driven. E.g. pension, relocation expense.	- Does not meet the causal-beneficial standard. In this instance, cost pools are not homogeneous (i.e. there are disparate plan expenses within the pool). Costs were caused by benefits realized elsewhere.
<u>CAS 418</u> - Allocation of Direct and Indirect Costs	- Indirect costs are accumulated within homogeneous cost pools. - Pooled costs are allocated to cost objectives in a reasonable proportion to the benefit realized (causal – beneficial relationship). <sup>37</sup>	- Sites receive allocations for fringe benefits, health insurance, relocation costs. Allocations based upon headcount (i.e. a peanut butter spread across all Boeing sites).	- Indirect costs are accumulated within non-homogeneous cost pools. Costs w/in pool are not the same or similar. <sup>38</sup> - Fails causal – beneficial test.
<u>CAS 420</u> – Accounting for Independent Research and Development Bid and Proposal Costs	- The basic unit for accumulation and allocation of costs shall be the individual IRAD project. - IRAD B&P cost pools of a business unit (BU) shall be allocated to final cost objectives of that BU based on cause – benefit relationship. <sup>39</sup>	- Sites receive IRAD B&P cost allocations from across the IDS organization, whether or not the site participated in and /or benefited from the project.	- Costs are not accumulated and allocated to project-level cost objectives. Instead, these costs are accumulated at Boeing home office and subsequently allocated across the sites. - If no benefit, then no cost. <sup>40</sup>

TABLE 3. IDS NON-COMPLIANCE WITH CAS 403, 418, 420

## RECOMMENDATIONS

Citing the failure of the Government to prevent or reverse the Boeing IDS decision, immediate, proactive measures are needed to ensure that service programs are, in the future, better protected from unfavorable corporate decisions. In pursuit of this worthy goal, we should:

- Re-invigorate the Government's use of prescriptive standards, like the cost accounting standards, where/when necessary. As application/enforcement of CAS has become somewhat of a lost art, this will require wholesale immersion/retraining of appropriate Government personnel in their structure, effective application, and utility. Procuring contracting officers, auditors, and administrative contracting officers should be/become well-versed and adept in the nuances of the standards and how (and when) they should be brought to bear. Educated, well reasoned application and enforcement of these standards will deter defense contractors from making cost-structure decisions that may be GAAP compliant, yet in direct contravention to Government interests. Reinvigoration of CAS, in a time when many pundits are calling for their total elimination, would hold defense contractors responsible for self-induced cost increases to Service programs. In this situation, if a contractor saw the need to re-organize to enhance efficiencies, he could do so as long as the company was willing to bear any additional costs associated with that reorganization. The standards, as they currently exist, are more than adequate to address/prevent most instances of contractor malfeasance. Paramount is that the Government becomes (more) comfortable with their routine, appropriate application, regardless of contractor protestations.
- Have DCAA/DCMA provide the PMOs with accounting/costing system type training/professional development on a periodic basis. This could be accomplished within existing budgetary constraints, be informal, yet very informative in nature. One approach would be for DCAA/DCMA to provide this training in conjunction with a weapon system's periodic progress review (PPR), usually held at the prime contractor's facility. These (typically quarterly) reviews bring the major players together from both Government and contractor organizations. A few hours of focused training to key PMO personnel, provided by an experienced DCAA auditor, would significantly raise the current level of knowledge in this critical area. Currently, PMOs tend to regard changes to accounting systems as outside their lane, the sole

responsibility of DCAA/DCMA for surveillance and action, when warranted. This is a mistake, a viewpoint which hampers the Government's ability to discourage aberrant accounting approaches early in the acquisition process. Through this proposed periodic emphasis/training, an inter-agency/Service teaming relationship will be fostered. In this scenario, a contractor considering and/or proposing unfavorable cost accounting modifications will most certainly encounter a knowledgeable, coherent, unified, Government viewpoint/position.

- Establish a Department-level review panel comprised of service and departmental leaders to assess, among other things, contractor/ corporate restructuring proposals. This review would provide a high-level, objective assessment of the positive and negative aspects of such alternatives. This panel serves as the decision authority when contractor's proposals have been determined critical to domestic technological capability, industrial capacity or program cost. Make the board's decisions contractually binding upon contractors working within the U.S. defense sector. This panel would also serve as the last measure of defense against contractors making business decisions that are clearly unfavorable to the Government.

## **CONCLUSION**

The relationship between defense contractors and the DoD is today at a critical juncture. As the military workload becomes an ever smaller portion of the business base, corporate leverage and power of defense contractors continue to grow. In parallel, opportunities and instances of fraud and abuse are on the rise. This fact has ramifications for weapon systems being developed, fielded, and supported today as well as for those still on the proverbial drawing board.

A November 2004 *Wall Street Journal* article focused upon the tribulations of the Boeing Company as it sought to extricate itself from a recent scandal involving the 2003 hiring of Ms. Darleen Druyun, a former senior U.S. Air Force executive. Under federal investigation, Ms. Druyun admitted to improperly favoring Boeing for several high-value procurement contracts that she was responsible for while in Government service. Mr. Michael Sears, Boeing's recently fired CFO, plead guilty for his complicity in Ms. Druyun's conflict-of-interest tinged decisions. As of this writing, there is a growing, corroborated concern that Boeing and similar defense-related conglomerates may be unwilling (or unable) to effectively police their ranks. Because of Boeing's current legal/ethical challenges, many are now questioning whether the company is a

good fit for the role of lead system integrator for the Army's Future Combat System, a \$100B program.<sup>41</sup>

Clearly, the DoD will not be able to call all the shots, all of the time. Furthermore, this treatise does not suggest that aggressive, effective Government oversight is a panacea, enabling prevention of all instances and types of fraud, abuse, and otherwise unfavorable corporate decision-making. This examination is far more limited in scope and suggests only that there are scenarios in which the DoD retains much power and leverage. In many instances, laws exist, regulations are in place, and standards (including cost accounting standards) are called out in contractual documents. These levers need only be effectively employed by knowledgeable, capable Government overseers.

The only remaining decision is when and where to bring these capabilities to bear. There is a school of thought among senior federal employees which postulates that the DoD has lost its will and ability to successfully prosecute these opportunities. If this is true, then time is of the essence. We must immediately educate and retool our defense workforce, making our people fully aware, and capable of employing effective remedies to invasive and damaging contractor practices and decisions. To do anything less is true neglect. Allowing the Boeing IDS restructuring, as originally proposed by the contractor, is an example of such neglect.

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## ENDNOTES

<sup>1</sup> "Military-Industrial Complex Revisited: How Weapons Makers are Shaping U.S. Foreign and Military Policies," 20 June 2002; available from [http://www.fpiif.org/papers/micr/companies\\_body.html](http://www.fpiif.org/papers/micr/companies_body.html); Internet; accessed 28 September 2004, 1.

<sup>2</sup> Ibid.

<sup>3</sup> Daniel Goure, et al, "Defense Restructuring and the Future of the U.S. Defense Industrial Base: A Report of the CSIS Senior Policy Panel on the Future of the U.S. Defense Industrial Base Findings and Recommendations," March 1998; available from <http://www.csis.org/polmil/dibreport.html>; Internet; accessed 28 September 2004, 9.

<sup>4</sup> Ibid., 17.

<sup>5</sup> "Investment Research, Boeing CO (BA)," 3 October 2004; available from <http://stockpoint.usaa.com/quote.asp?Symbol=BA&Source=USAA>; Internet; accessed 4 October 2004, 1.

<sup>6</sup> "The Formation of Boeing Integrated Defense Systems," briefing charts, Boeing Mesa, 12 November 2002, 3.

<sup>7</sup> Ibid., 4.

<sup>8</sup> Ibid., 7.

<sup>9</sup> Ibid., 11.

<sup>10</sup> Ibid., 12.

<sup>11</sup> Ibid., 13.

<sup>12</sup> Ibid.

<sup>13</sup> Ibid., 17.

<sup>14</sup> Ibid., 18.

<sup>15</sup> Keith Edwards, "DCMA Assessment of Boeing Rate Hikes to Army Programs," briefing charts, Boeing Mesa, 30 June 2003, 17.

<sup>16</sup> Ibid., 15.

<sup>17</sup> Ibid., 28.

<sup>18</sup> Ibid., 17.

<sup>19</sup> Ibid.

<sup>20</sup> Merritt, et al., "Boeing Army Program Cost Increases," briefing charts, Pentagon, 19 November 2003, 3.

<sup>21</sup> "Status Update WHQ Cost Management and Integrated Defense Systems Cost Structure," briefing charts, Pentagon, 9 July 2003, 19.

<sup>22</sup> Ibid.

<sup>23</sup> Ibid.

<sup>24</sup> Michael Merritt, "Point Paper: Status as of January 22, 2004, DCMA/Boeing Cost Efficiency Initiatives," 22 January 2004, 1.

<sup>25</sup> "Pricing Handbook," 14. Cost Accounting Standards, 29 November 2004; available from <<http://fast.faa.gov/archive/v1198/pguide/98-30C14.html>>; Internet; accessed 29 November 2004.

<sup>26</sup> Ibid., 2.

<sup>27</sup> Ibid.

<sup>28</sup> Ibid., 3.

<sup>29</sup> Ibid.

<sup>30</sup> Ibid., 4.

<sup>31</sup> Ibid., 6.

<sup>32</sup> Ibid.

<sup>33</sup> Ibid., 11.

<sup>34</sup> Ibid.

<sup>35</sup> Ibid., 12.

<sup>36</sup> Ibid., 16.

<sup>37</sup> Ibid., 26.

<sup>38</sup> "FAR, Part Appendix," 7 March 2003; available from <<http://farsite.hill.af.mil/reghtml/regs/far2afmcfars/fardfars/far/FARapndx1.html>>; Internet; accessed 7 March 2003, 4.

<sup>39</sup> "Pricing Handbook," 27.

<sup>40</sup> Ibid.

<sup>41</sup> Andy Pasztor, "Investigation of Boeing Grows Wider," *Wall Street Journal*, 9 November 2004, p. 3.

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